



National Weather Service

Storm Data and Unusual Weather Phenomena



July 2002

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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ATLANTIC NORTH

ANZ250	Merrimack River Ma And Out 20Nm To Plymouth Ma And Out 40Nm								
Rockport	15 1900EST				0	0			Marine Tstm Wind (G43)
	Gloucester Buoy								
ANZ250	Merrimack River Ma And Out 20Nm To Plymouth Ma And Out 40Nm								
Rockport	23 1458EST				0	0			Marine Tstm Wind (G35)
	Beverly ASOS								
ANZ230	Boston Harbor								
Boston Light	23 1509EST				0	0			Marine Tstm Wind (G40)
	Boston ASOS								
ANZ234	Buzzards Bay								
Bzzrds Bay Ent Tower	23 1515EST				0	0			Marine Tstm Wind (G40)
	WSR-88D								
ANZ250	Merrimack River Ma And Out 20Nm To Plymouth Ma And Out 40Nm								
Stellwagen Bank	23 1515EST				0	0			Marine Tstm Wind (G40)
	WSR-88D								
ANZ236	Narragansett Bay								
Newport	23 1515EST				0	0			Marine Tstm Wind (G40)
	WSR-88D								
ANZ235	Rhode Island Sound								
Bzzrds Bay Ent Tower	23 1515EST				0	0			Marine Tstm Wind (G40)
	WSR-88D								
ANZ231	Cape Code Bay								
Brewster	23 1556EST				0	0			Marine Tstm Wind (G36)
	Hyannis ASOS								
ANZ237	Block Island Sound								
Point Judith	28 2345EST				0	0			Marine Tstm Wind (G40)
	WSR-88D								
ANZ234	Buzzards Bay								
Bzzrds Bay Ent Tower	28 2345EST				0	0			Marine Tstm Wind (G40)
	WSR-88D								
ANZ236	Narragansett Bay								
Newport	28 2345EST				0	0			Marine Tstm Wind (G40)
	WSR-88D								
ANZ235	Rhode Island Sound								
Bzzrds Bay Ent Tower	28 2345EST				0	0			Marine Tstm Wind (G40)
	WSR-88D								

CONNECTICUT, Northeast

Hartford County									
Farmington to Glastonbury	15	1630EST 1710EST			0	1	20K		Thunderstorm Wind (G52) ^M
Severe thunderstorms moving through Hartford County downed a large tree onto a pickup truck in Farmington, which resulted in one injury. The storms also downed trees and wires in West Hartford, Hartford, and Glastonbury. A Skywarn spotter in Wethersfield measured a wind gust to 60 mph as the storms moved through.									
Hartford County									
Canton to Burlington	19	1530EST			0	0	2K		Thunderstorm Wind (G50)



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CONNECTICUT, Northeast

Hartford County

Windsor	19	1535EST			0	0			Hail(1.00)
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An isolated severe thunderstorm downed large branches in Canton and Burlington. Quarter sized hail fell in Windsor.

Tolland County

Somers	23	1430EST			0	0	3K		Thunderstorm Wind (G50)
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Hartford County

Simsbury	23	1445EST			0	0	5K		Thunderstorm Wind (G50)
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Severe thunderstorms downed wires in Somers and large trees in Simsbury.

MASSACHUSETTS, Central and East

Hampden County

Granville	04	1630EST			0	0			Hail(0.75)
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Hampden County

Chicopee to Springfield	04	1645EST 1655EST			0	0			Hail(0.88)
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Hampden County

Springfield	04	1655EST			0	0	2K		Thunderstorm Wind (G50)
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Hampshire County

Southampton	04	1835EST			0	0	10K		Lightning
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Severe thunderstorms produced dime to nickel sized hail in Granville, Chicopee, and Springfield. The storms also downed trees and large branches in Springfield and Wilbraham. Lightning from other thunderstorms later in the day struck two large hemlock trees in Southampton, igniting a fire at an auto salvage yard.

Worcester County

Sterling	15	1725EST			0	0			Hail(0.75)
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Middlesex County

Wayland	15	1803EST			0	0	2K		Thunderstorm Wind (G50)
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Norfolk County

Milton to Quincy	15	1827EST 1845EST			0	0	25K		Thunderstorm Wind (G62) ^M
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Norfolk County

Dedham to Weymouth	15	1831EST 1845EST			0	0	95K		Lightning
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Norfolk County

Randolph	15	1854EST			0	0			Hail(1.00)
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Plymouth County

Abington to Pembroke	15	1904EST 1915EST			0	0	5K		Thunderstorm Wind (G50)
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Plymouth County

Rockland	15	1908EST			0	0			Hail(0.75)
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Hampshire County

Florence	15	2155EST			0	0			Hail(1.00)
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A fast-moving line of severe thunderstorms brought large hail and damaging winds to parts of central and eastern Massachusetts. The damage began in Worcester County, where thunderstorms dropped dime sized hail on the border of Sterling and Princeton, before moving into southern Middlesex County where large branches were downed in Wayland.

Additional storms developed to the south, and caused additional damage in Norfolk and Plymouth Counties. A wind gust to 71 mph was measured at the Blue Hill Observatory in Milton, and there were numerous reports of downed trees and wires in Milton and Quincy. Quarter sized hail fell in Randolph, as observed by a Skywarn spotter, which lasted for about three minutes. In Dedham, lightning struck a house and ignited a fire which damaged the roof. Lightning also struck a two-story building in Weymouth causing



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MASSACHUSETTS, Central and East

minor damage. As these storms progressed into Plymouth County, they downed trees and wires in Abington, Whitman, Hanson, Hanover, and Pembroke. Dime sized hail was reported by a Skywarn spotter in Rockland. In all, about 7,500 customers were left without power in Norfolk and Plymouth Counties after the storms moved through

Essex County

Methuen to Salisbury	19	0115EST 0215EST			0	0	10K	Lightning
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Norfolk County

Milton to Quincy	19	0500EST 0700EST			0	0	90K	Lightning
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Worcester County

Southbridge	19	0645EST			0	0		Hail(0.75)
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Worcester County

Southbridge	19	0645EST			0	0	2K	Thunderstorm Wind (G50)
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Lightning from early morning thunderstorms caused brief power outages and minor damage in Essex County. A shed was damaged by a lightning-induced fire in Methuen and about 2,500 customers lost power in Methuen, Andover, Lawrence, Boxford, and Salisbury.

Just after dawn, other thunderstorms moved across central and eastern Massachusetts. One thunderstorm briefly became severe in Worcester County, producing dime sized hail in Southbridge and downing large branches. The storm weakened as it reached greater Boston, but lightning struck two homes in Quincy and damaged two vehicles on the Southeast Expressway in Milton. No injuries were reported.

Franklin County

Shelburne	23	1310EST			0	0	5K	Thunderstorm Wind (G50)
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Hampshire County

Northampton to Easthampton	23	1343EST 1353EST			0	0	8K	Thunderstorm Wind (G62) ^M
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Franklin County

Northfield to New Salem	23	1345EST 1355EST			0	0	8K	Thunderstorm Wind (G50)
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Hampden County

West Springfield to Westfield	23	1352EST 1355EST			0	0	10K	Thunderstorm Wind (G51) ^M
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Middlesex County

Pepperell to Ashby	23	1404EST 1420EST			0	0	5K	Thunderstorm Wind (G50)
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Worcester County

West Brookfield	23	1415EST Brief F1 touchdown	0.4	75	0	0	50K	Tornado (F1)
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Worcester County

East Brookfield to Shrewsbury	23	1430EST 1500EST			0	0	25K	Thunderstorm Wind (G85)
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Hampden County

Westfield to Monson	23	1436EST 1441EST			0	0	5K	Thunderstorm Wind (G50)
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Middlesex County

Concord	23	1445EST 1500EST			0	0	35K	Thunderstorm Wind (G65)
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Middlesex County

Concord	23	1500EST			0	0	250K	Lightning
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Essex County

Peabody to Marblehead	23	1507EST 1522EST			0	0	15K	Thunderstorm Wind (G50)
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MASSACHUSETTS, Central and East

Suffolk County							
Boston	23	1520EST			0 0	8K	Thunderstorm Wind (G50)
Worcester County							
Worcester	23	1525EST			0 0	2K	Thunderstorm Wind (G50)
Norfolk County							
Sharon	23	1545EST			0 0	2K	Thunderstorm Wind (G50)
Plymouth County							
Hingham	23	1600EST			0 0	1K	Thunderstorm Wind (G50)
Norfolk County							
Weymouth	23	1605EST			0 0	5K	Thunderstorm Wind (G50)
Plymouth County							
Brockton	23	1630EST			0 0	250K	Lightning

A line of severe thunderstorms moved across much of the Bay State during the afternoon and early evening, producing widespread wind damage. There were numerous reports of downed trees, power lines, and large branches from the Connecticut River Valley to the Worcester Hills, Merrimack Valley, and the eastern Massachusetts coastline from Marblehead to Hingham. Amateur radio operators measured wind gusts to 71 mph in Easthampton and to 59 mph in West Springfield as the storms moved through. In the city of Boston, winds estimated near 60 mph blew down scaffolding on a school building, while in Salem winds of similar magnitude ripped siding off a house.

A tornado briefly touched down in West Brookfield at 315 pm, and there were no injuries reported. The tornado had an approximate path width of 75 yards, a path length of about one-half mile, and was only on the ground for about 30 seconds, as determined by a National Weather Service survey of the area. The intensity of the tornado was determined to be an F1 on the Fujita damage scale, which corresponds to wind speeds between 73 and 112 mph. It is likely that winds were closer to the upper region of that range. The tornado formed over the northeast portion of Lake Wickaboag and traveled to the east, dissipating just to the east of the portion of Wickaboag Valley Road that is adjacent to the lake. Microburst damage was evident for about another two miles east of where the tornado circulation ended.

Eyewitnesses reported that a curtain of water was drawn from the lake as high as 50 feet into the air, and traveled east. A portion of it hit a house by the lake, causing its roof to fly off and become embedded to a tree across the street. There was also a brief flash as power lines were downed on Wickaboag Valley Road. Although most downed trees were facing southwest to northeast, there was some evidence of trees blown down to the north and northwest near the lake.

The same thunderstorm was responsible for another microburst in Spencer. Large trees were uprooted, some of which landed on cars and houses. Wind speeds were estimated to be near 100 mph based upon the damage observed.

Another severe thunderstorm produced a microburst in Concord, as determined by a National Weather Service survey, which occurred between 345 and 400 pm. Straight line winds on Monument Street were estimated near 75 mph. Numerous large trees were snapped off and uprooted, which in turn knocked down many electric poles and wires. A couple of large trees were snapped off, and fell on a house on Monument Street. The microburst was approximately one-half mile wide and about one and a half miles long.



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NEW HAMPSHIRE, Southern

Hillsborough County

Hillsboro Center	15	1525EST			0	0	2K		Thunderstorm Wind (G50)
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Severe thunderstorms downed several large trees on Route 9 in Hillsborough.

Cheshire County

Keene to Harrisville	23	1320EST 1331EST			0	0	8K		Thunderstorm Wind (G50)
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Hillsborough County

Peterborough	23	1341EST			0	0	2K		Thunderstorm Wind (G50)
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Hillsborough County

Manchester to Nashua	23	1400EST 1420EST			0	0	15K		Thunderstorm Wind (G50)
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Cheshire County

Jaffrey	23	1425EST			0	0	5K		Thunderstorm Wind (G50)
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A line of severe thunderstorms moved across southern New Hampshire. Trees and wires were downed in Keene and Harrisville, in Cheshire County. The same storms downed large branches as they reached Peterborough, in Hillsborough County, but the damage was more significant as the storms moved farther east. A roof was blown off a building in Manchester, and there were many reports of downed trees and wires in New Boston and Nashua. A plywood board was sent airborne by a wind gust and apparently sheared a gas line at a business, which shut down a portion of Daniel Webster Highway for more than an hour. In all, about 7,500 customers were left without power because of the storms.

RHODE ISLAND

Kent County

Coventry	23	1535EST			0	0	2K		Thunderstorm Wind (G50)
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Providence County

Providence to Scituate	23	1545EST 1605EST			0	0	5K		Thunderstorm Wind (G50)
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Providence County

Cranston	23	1550EST			0	0			Hail(0.75)
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Severe thunderstorms downed trees in Coventry, Providence, and Scituate and produced dime sized hail in Cranston.